

DECORRELATING RAKE RECEIVER APPARATUS AND METHOD

ABSTRACT OF THE DISCLOSURE

5 A decorrelating rake receiver (401) using a signal processor (213) and
corresponding method (1000) to determine filter coefficients (1005). The
decorrelating rake receiver includes a plurality of filters (219) arranged to be coupled
to an input signal (403) and the filter coefficients (409), the plurality of filters
operable to provide a plurality of output signals and a coefficient generator (407),
10 coupled to the input signal, to explicitly and definitely determine the filter
coefficients for the plurality of filters such that the plurality of filters perform a
decorrelating rake process. The decorrelating rake receiver further includes a
combiner (221) to combine the plurality of output signals and provide a received
signal (405). The decorrelating rake receiver (401) is suitable for use in a wireless
15 communication device (101) or base transceiver (103).